

Phase 11

Vedic Ganita Sutras & Upsutras

(Sankhiya Nishta – Yoga Nishtha – Samya Samuchayya Aadhar Vavastha Ganit)

संख्य निष्ठा योग निष्ठा साम्य समुच्चय आधार व्यवस्था गणित

20 22 12 22 16 23 15 27 18

11.5.3

Ganita Sutra 3 and Ganita Upsutra 3

1. Text
2. Text composition data
3. Placement of Ganita Sutra 3 and Ganita Upsutra 3 are at serial number no 5 and 6 of Integrated format (Ten folds of TCV of text of Ganita Sutra 3 & Upsutra 3)
4. Ganita Sutra 3 text (ऊर्ध्वतिर्यग्भ्याम्)
5. Text Ganita Sutra 3 Grammar Rule Dual (Udharav, Tirayak) third, fourth and fifth Vibhagti Paratyā (Bhayam)
6. Sutra 3 in sequential continuity of Ganita Sutras 1 & 2 Table of Ganita Sutras, Geeta chapters and Puranas
7. Cyclic table 1 Cyclic phases of syllable wise composition of first word formulation of Ganita Sutra 3 Syllables split
8. Cyclic table 2 Cyclic phases of syllable wise composition of first word formulation of Ganita Upsutra 3 Syllables split
9. Transcendental content flow into Akash (Space) from orb of the Sun (Surya) with Dhuruv (Pole Star) base
10. Ten folds table of word formulations Surya, Dhuruv and Akash, Table 3 Ten folds table of TCV of Word formulation Surya 'सूर्य' Sun, Table 4 Ten folds table of TCV of Word formulation Dhurav 'ध्रुव' Pole Star, Table 5 Ten folds table of TCV of Akash आकाश, Space
11. Transcendental lord Shiv शिव as Agni Satamb अग्नि स्तम्भ / fire pillar
12. Cyclic phases of word formulation Surya
13. Cyclic phases of word formulation Dhuruv
14. Cyclic phases of word formulation Akash
15. Transcendental content flow in eight directional frame
16. Transcendental content flow in ten directional frame
17. Transcendental content flow in four directional frame
18. Sequential continuity of formats of Ganita Sutras 1 to 4
19. Creator's space is spatial order space
20. Sutras Grammar

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(Sankhiya Nishta – Yoga Nishtha – Samya Samuchayya Aadhar Vavastha Ganit)

संख्य निष्ठा योग निष्ठा साम्य समुच्चय आधार व्यवस्था गणित

20 22 12 22 16 23 15 27 18

11.5.3

Ganita Sutra 3 and Ganita Upsutra 3

1

Text

Ganita Sutra 3	ऊर्ध्वतिर्यग्भ्याम्
Ganita Upsutra 3	आद्यमाद्येनान्त्यमन्त्येन

2

Text composition data

C1=Letter, C2 = Syllable, C3 = Letter, C4 = TCV

	C1	C2	C3	C4
Ganita Sutra 3	1	5	15	56
Ganita Upsutra 3	1	9	23	96

3

Placement of Ganita Sutra 3 and Ganita Upsutra 3

are at serial number no 5 and 6 of Integrated format

Ten folds of TCV of text of Ganita Sutra 3 and Ganita Upsutra 3

W= Word, Tw =Total word, S = Syllable, Ts= Total syllable, L = Letter, TL = Total letter, TCV = TCV,
TTCV = Total TCV, GT = Grand total of all the above four, GGT = grand total of grand totals of all

	W	Tw	S	Ts	L	TL	TCV	TTCV	GT	GGT
Ganita Sutra 3	1	9	5	37	15	87	56	347	77	480
Ganita Upsutra 3	1	10	9	46	23	110	96	443	129	609
Total	2	19	14	83	38	197	152	790	206	1089
Difference	0	1	4	9	8	23	40	96	52	229

4

Ganita Sutra 3 text

(ऊर्ध्वतिर्यग्भ्याम्)

Dual words (padas) and third, fourth and fifth Vibhagti Prataya (भ्याम् Bhayam)

(i) ऊर्ध्व

(ii) तिर्यक्

(iii) भ्याम्

TCV (ऊर्ध्व) = 23, TCV (तिर्यक्) = 11,

TCV (भ्याम्) = 20 = 5 x 4

(20 = 5 x 4, Sathapatya D7)

Values pair (23, 11)

23 = (3+5) + (3x 5),

11 = (3 + 5 + 3) = 11

5-space is of solid order

Summation value 34- = H₉Difference value 12= D₅

Sathapatya

TCV (ऊर्ध्व) = 23, Sathapatya h6

TCV (तिर्यक्) = 11, Sathapatya G₁₁⁵

TCV (भ्याम्) = 20, Sathapatya D7

Simple rendering

Udharav (ऊर्ध्व) upward

Tirayak (तिर्यक्) diagonal wise

5

Text Ganita Sutra 3 Grammar Rule

Dual (Udharav, Tirayak) third, fourth and fifth Vibhagti
Paratya (Bhayam)

Details being tabulated in PDF document 11.5.4

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Sutra 3 in sequential continuity of Ganita Sutras 1 & 2

Table of Ganita Sutras, Geeta chapters and Puranas

C0 = Serial number, C1 = Geeta chapters (GC), C2 = Ganita Sutras (GS), C3 = Purans (P) C4 = Puran title (PT)\
(Purans sequential enlistment as per Vaivasamhita Shiv Puran)

C0	C1	C2	C3	C4
1	GC 10	GS 01	P 01	P1 Braham Puran

12		7	7	6	7	1	0		28	401
13		0	1	1	6	1	7		16	417
14		1	0	5	5	6	7		24	441
15		1	5	0	1	1	6		14	455
16		4	5	1	0	5	5		20	475
17		1	4	1	5	0	1		12	487
18		3	3	4	5	1	0		16	503
19		0	1	1	4	1	3		10	513
20		1	0	3	3	2	3		12	525
21		1	3	0	1	1	2		8	533
22		2	3	1	0	1	1		8	541
23		1	2	1	1	0	1		6	547
24		1	1	0	1	1	0		4	551
25		0	1	1	0	1	1		4	555
26		1	0	1	1	0	1		4	559
27		1	1	0	1	1	0		4	563
28		0	1	1	0	1	1		4	567
29		1	0	1	1	0	1		4	571
30		1	1	0	1	1	0		4	575
31		0	1	1	0	1	1		4	579

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Cyclic table 2

**Cyclic phases of syllable wise composition
of first word formulation of Ganita Upsutra 3
Syllables split**

SN	i	ii	iii	iv	v	vi	vii	viii	ix
L	आ	द्य	मा	द्ये	ना	न्त्य	म	न्त्ये	न
	2	8	11	13	10	14	10	19	9

1		2	8	11	13	10	14	10	19	9		96	96
2		6	3	2	3	4	4	9	10	7		48	144
3		3	1	1	1	0	5	1	3	1		16	160
4		2	0	0	1	5	4	2	2	2		18	178

5		2	0	1	4	1	2	0	0	0		10	188
6		2	1	3	3	1	2	0	0	2		14	202
7		1	2	0	2	1	2	0	2	0		10	212
8		1	2	2	1	1	2	2	2	1		14	226
9		1	0	1	0	1	0	0	1	0		4	230
10		1	1	1	1	1	0	1	1	1		8	238
11		0	0	0	0	1	1	0	0	0		2	240
12		0	0	0	1	0	1	0	0	0		2	242
13		0	0	1	1	1	1	0	0	0		4	246
14		0	1	0	0	0	1	0	0	0		2	248
15		1	1	0	0	1	1	0	0	0		4	252
16		0	1	0	1	0	1	0	0	1		4	256
17		1	1	1	1	1	1	0	1	1		8	264
18		0	0	0	0	0	1	1	0	0		2	266
19		0	0	0	0	1	0	1	0	0		2	268
20		0	0	0	1	1	1	1	0	0		4	272
21		0	0	1	0	0	0	1	0	0		2	274
22		0	1	1	0	0	1	1	0	0		4	278
23		1	0	1	0	1	0	1	0	0		4	282
24		1	1	1	1	1	1	1	0	1		8	290
25		0	0	0	0	0	0	1	1	0		2	292
26		0	0	0	0	0	1	0	1	0		2	294
27		0	0	0	0	1	1	1	1	0		4	298
28		0	0	0	1	0	0	0	1	0		2	300
29		0	0	1	1	0	0	1	1	0		4	304
30		0	1	0	1	0	1	0	1	0		4	308

31		1	1	1	1	1	1	1	1	0		8	316
32		0	0	0	0	0	0	0	1	1		2	318
33		0	0	0	0	0	0	1	0	1		2	320
34		0	0	0	0	0	1	1	1	1		4	324
35		0	0	0	0	1	0	0	0	1		2	326
36		0	0	0	1	1	0	0	1	1		4	330
37		0	0	1	0	1	0	1	0	1		4	334
38		0	1	1	1	1	1	1	1	1		8	342
39		1	0	0	0	0	0	0	0	1		2	344
40		1	0	0	0	0	0	0	1	0		2	346
41		1	0	0	0	0	0	1	1	1		4	350
42		1	0	0	0	0	1	0	0	0		2	352
43		1	0	0	0	1	1	0	0	1		4	356
44		1	0	0	1	0	1	0	1	0		4	360
45		1	0	1	1	1	1	1	1	1		8	368
46		1	1	0	0	0	0	0	0	0		2	370
47		0	1	0	0	0	0	0	0	1		2	372
48		1	1	0	0	0	0	0	1	1		4	376
49		0	1	0	0	0	0	1	0	0		2	378
50		1	1	0	0	0	1	1	0	0		4	382
51		0	1	0	0	1	0	1	0	1		4	386
52		1	1	0	1	1	1	1	1	1		8	394
53		0	1	1	0	0	0	0	0	0		2	396
54		1	0	1	0	0	0	0	0	0		2	398
55		1	1	1	0	0	0	0	0	1		4	402
56		0	0	1	0	0	0	0	1	0		2	404

57		0	1	1	0	0	0	1	1	0		4	408
58		1	0	1	0	0	1	0	1	0		4	412
59		1	1	1	0	1	1	1	1	1		8	420
60		0	0	1	1	0	0	0	0	0		2	422
61		0	1	0	1	0	0	0	0	0		2	424
62		1	1	1	1	0	0	0	0	0		4	428
63		0	0	0	1	0	0	0	0	1		2	430
64		0	0	1	1	0	0	0	1	1		4	434
65		0	1	0	1	0	0	1	0	1		4	438
66		1	1	1	1	0	1	1	1	1		8	446
67		0	0	0	1	1	0	0	0	0		2	448
68		0	0	1	0	1	0	0	0	0		2	450
69		0	1	1	1	1	0	0	0	0		4	454
70		1	0	0	0	1	0	0	0	0		2	456
71		1	0	0	1	1	0	0	0	1		4	460
72		1	0	1	0	1	0	0	1	0		4	464
73		1	1	1	1	1	0	1	1	1		8	472
74		0	0	0	0	1	1	0	0	0		2	474
75		0	0	0	1	0	1	0	0	0		2	476
76		0	0	1	1	1	1	0	0	0		4	480
77		0	1	0	0	0	1	0	0	0		2	482
78		1	1	0	0	1	1	0	0	0		4	486
79		0	1	0	1	0	1	0	0	1		4	490
80		1	1	1	1	1	1	0	1	1		8	498

9

Trancendental content flow into Akash (Space) from orb of the Sun (Surya) with Dhuruv (Pole Star) base

TCV (सूर्य) = 13; G_{13}^6 , TCV (ध्रुव) = 19, G_{19}^9 , TCV (आकाश) = D4
flow range phases = $13 + 19 + 8 = 40 = D12$

10

Ten folds table of word formulations Surya, Dhuruv and Akash

Table 3

Ten folds table of TCV of Word formulation Surya 'सूर्य' Sun
Ten folds Summation value = 737

S N.	Symbol	Value	Total
1.	W	1	1
2.	S	2	3
3.	L	5	8
4.	T	13	21
5.	T T	153	174
6.	F F	113	287
7.	F	42	329
8.	H	50	379
9.	R	115	494
10.	SR	243	737

Table 4

Ten folds table of TCV of Word formulation Dhurav 'ध्रुव' Pole Star

Ten folds Summation value = 722

S N.	Symbol	Value	Total
1.	W	1	1
2.	S	2	3
3.	L	5	8
4.	T	19	27
5.	T T	-2	25

6.	FF	119	144
7.	F	60	204
8.	H	64	268
9.	R	145	413
10.	SR	309	722

Table 5

Ten folds table of TCV of Akash आकाश, Space
Ten folds Summation value = 505

S N.	Symbol	Value	Total
1.	W	1	1
2.	S	3	4
3.	L	5	9
4.	T	8	17
5.	TT	16	33
6.	FF	108	141
7.	F	64	205
8.	H	22	227
9.	R	90	317
10.	SR	188	505

Grand Total of summation value of ten folds of TCV's of Surya, Dhruv and Akash =
 $737 + 722 + 505 = 1964 = 2000 - 36$, $36 = \text{TCV (अनुबन्ध)} = \text{TCV (प्रणवः)} = \text{TCV (श्री :
 ॐ)} = \text{TCV (य र ल व)} + \text{TCV (श् स् ष ह)}$

11

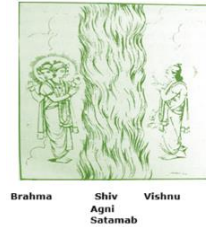
Transcendental lord Shiv शिव as Agni Satamb अग्नि स्तम्भ / fire pillar

TCV (शिव) = 12, D12 = 40

TCV (अग्नि) = 14 = H4

TCV (स्तम्भ) = 26 = H7

$40 = 14 + 26$



12
Cyclic phases of word formulation Surya

सूर्य
3 6 2 1 1

Bases phases 10 of total value 57

Frequency phases 15 of total value 40 = 5 x 8

Note :- Frequency phases total value 40 is parallel with
transcendental lord Shiv as Agni Satamb. Transcendental content flow is
in eight directional frame

Table 6

1		3	6	2	1	1		13
2		3	4	1	0	2	10	23
3		1	3	1	2	1	8	31
4		2	2	1	1	0	6	37
5		0	1	0	1	2	4	41
6		1	1	1	1	2	6	47
7		0	0	0	1	1	2	49
8		0	0	1	0	1	2	51
9		0	1	1	1	1	4	55
10		1	0	0	0	1	2	57
11		1	0	0	1	0	2	59
12		1	0	1	1	1	4	63
13		1	1	0	0	0	2	65
14		0	1	0	0	1	2	67
15		1	1	0	1	1	4	71
16		0	1	1	0	0	2	73
17		1	0	1	0	0	2	75
18		1	1	1	0	1	4	79
19		0	0	1	1	0	2	81
20		0	1	0	1	0	2	83
21		1	1	1	1	0	4	87
22		0	0	0	1	1	2	89
23		0	0	1	0	1	2	91
24		0	1	1	1	1	4	95
25		1	0	0	0	1	2	97

13

Cyclic phases of word formulation Dhuruv

ध्रुव

7 1 3 7 1

Bases phases 8 of total value 87

Frequency phases 10 of total value 141

Note :- Transcendental Content flow is in ten directional frame

Table 7

1		7	1	3	7	1		19	19
2		6	2	4	6	6		24	43
3		4	2	2	0	0		8	51
4		2	0	2	0	4		8	59
5		2	2	2	4	2		12	71
6		0	0	2	2	0		4	75
7		0	2	0	2	0		4	79
8		2	2	2	2	0		8	87
9		0	0	0	2	2		4	91
10		0	0	2	0	2		4	95
11		0	2	2	2	2		8	103
12		2	0	0	0	2		4	107
13		2	0	0	2	2		6	113
14		2	0	2	0	0		4	117
15		2	2	2	0	2		8	125
16		0	0	2	2	0		4	129
17		0	2	0	2	0		4	133
18		2	2	2	2	0		8	141

14

Cyclic phases of word formulation Akash

आकाश

2 1 2 2 1

Bases phases 8 of total value 28

Frequency phases 15 of total value 40

Note :- 8 = D4, 28 = 4 x 7, 15 = h4, 40 = 4 x 10 D12.
 Transcendental content flow is in four directional frame

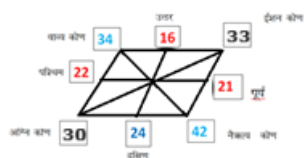
Table 8

1		2	1	2	2	1		8	8
2		1	1	0	1	1		4	12
3		0	1	1	0	0		2	14
4		1	0	1	0	0		2	16
5		1	1	1	0	1		4	20
6		0	0	1	1	0		2	22
7		0	1	0	1	0		2	24
8		1	1	1	1	0		4	28
9		0	0	0	1	1		2	30
10		0	0	1	0	1		2	32
11		0	1	1	1	1		4	36
12		1	0	0	0	1		2	38
13		1	0	0	1	0		2	40
14		1	0	1	1	1		4	44
15		1	1	0	0	0		2	46
16		0	1	0	0	1		2	48
17		1	1	0	1	1		4	52
18		0	1	1	0	0		2	54
19		1	0	1	0	0		2	56
20		1	1	1	0	1		4	60
21		0	0	1	1	0		2	62
22		0	1	0	1	0		2	64
23		1	1	1	1	0		4	68

15

Trancendental content flow in eight directional frame

Cyclic phases table

**Eight directional frame**

21 33 16 34 22 30 24 42

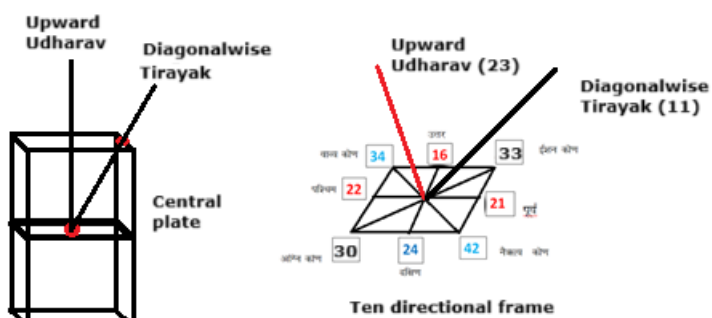
Frequency phase 13 of total value 566

1		21	33	16	34	22	30	24	42		222	222
2		12	17	18	12	8	6	18	21		112	334
3		5	1	6	4	2	12	3	9		42	376
4		4	5	2	2	10	9	6	4		42	418
5		1	3	0	8	1	3	2	0		18	436
6		2	3	8	7	2	1	2	1		26	462
7		1	5	1	5	1	1	1	1		16	478
8		4	4	4	4	0	0	0	0		16	494
9		0	0	0	4	0	0	0	4		8	502
10		0	0	4	4	0	0	4	4		16	518
11		0	4	0	4	0	4	0	4		16	534
12		4	4	4	4	4	4	4	4		32	566
13		0	0	0	0	0	0	0	0		0	566

16

Trancendental content flow in ten directional frame

Cyclic phases table



21 33 11 16 23 34 22 30 24 42

Bases phases 22 of total value 860

Frequency phases 6 of total value 32

Note :- 22 = H6, 860 = 86 x 10, 86 = D24, 24 = D8

6 = H2, 32 = D10,

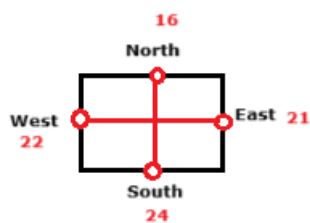
1		21	33	11	16	23	34	22	30	24	42		256	256
2		12	22	5	7	11	12	8	6	18	21		122	378
3		10	17	2	4	1	4	2	12	3	9		64	442
4		7	15	2	3	3	2	10	9	8	1		60	502
5		8	13	1	0	1	8	1	1	7	6		46	548
6		5	12	1	1	7	7	0	6	1	2		42	590
7		7	11	0	6	0	7	6	5	1	3		46	636

8		4	11	6	6	7	1	1	4	2	4		46	682
9		7	5	0	1	6	0	3	2	2	0		26	708
10		2	5	1	5	6	3	1	0	2	7		32	740
11		3	4	4	1	3	2	1	2	5	5		30	770
12		1	0	3	2	1	1	1	3	0	2		14	784
13		1	3	1	1	0	0	2	3	2	1		14	798
14		2	2	0	1	0	2	1	1	1	0		10	808
15		0	2	1	1	2	1	0	0	1	2		10	818
16		2	1	0	1	1	1	0	1	1	2		10	828
17		1	1	1	0	0	1	1	0	1	0		6	834
18		0	0	1	0	1	0	1	1	1	1		6	840
19		0	1	1	1	1	1	0	0	0	1		6	846
20		1	0	0	0	0	1	0	0	1	1		4	850
21		1	0	0	0	1	1	0	1	0	0		4	854
22		1	0	0	1	0	1	1	1	0	1		6	860
23		1	0	1	1	1	0	0	1	1	0		6	866
24		1	1	0	0	1	0	1	0	1	1		6	872
25		0	1	0	1	1	1	1	1	0	0		6	878
26		1	1	1	0	0	0	0	1	0	0		4	882
27		0	0	1	0	0	0	1	1	0	1		4	886
28		0	1	1	0	0	1	0	1	1	1		6	892
29		1	0	1	0	1	1	1	0	0	1		6	898
30		1	1	1	1	0	0	1	0	1	0		6	904
31		0	0	0	1	0	1	1	1	1	1		6	910
32		0	0	1	1	1	0	0	0	0	1		4	914
33		0	1	0	0	1	0	0	0	1	1		4	918
34		1	1	0	1	1	0	0	1	0	1		6	924

17

Trancendental content flow in four directional frame

Cyclic phases table



Four directional frame

21 16 22 24

Frequency phase 7 of total value 127

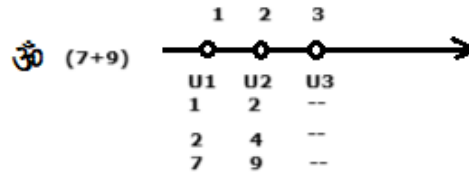
Note :- Biggest prime proper divisor of fourth perfect number = 8128 is 127
Transcendental content flows through seven Surya Rashmi (Sun Rays)

1		21	16	22	24		83	83
2		5	6	2	3		16	99
3		1	4	1	2		8	107
4		3	3	1	1		8	115
5		0	2	0	2		4	119
6		2	2	2	2		8	127
7		0	0	0	0		0	127

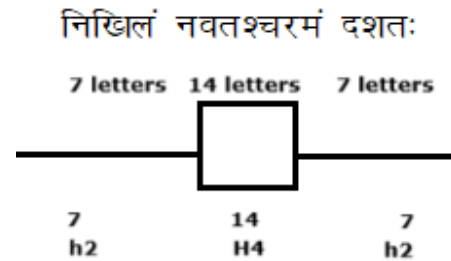
18

Sequential continuity of formats of Ganita Sutras 1 to 4

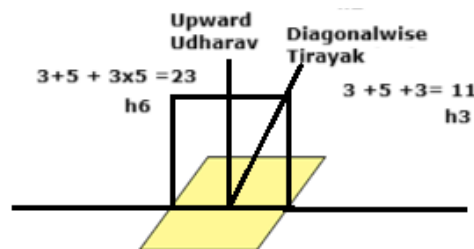
Sutra 1 ॐ एकाधिकेन पूर्वेण । (nine letters, seven letters)



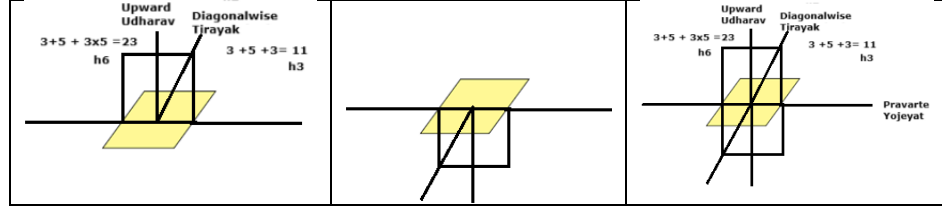
Sutra 2 निखिलं नवतश्चरमं दशतः



Sutra 3 ऊर्ध्वतिर्यग्भ्याम्



Sutra 4 परावर्त्य योजयेत

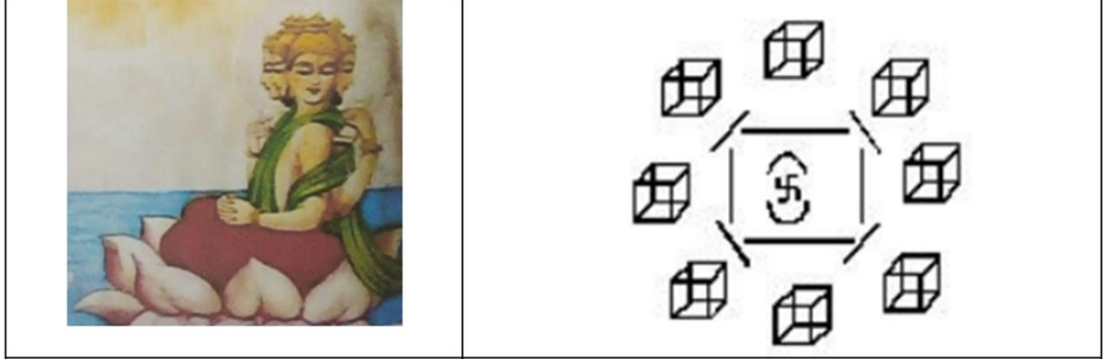


19

Creator's space is spatial order space

Sutras pairing : Sutra 1 and Sutra 2, Sutra 3 and Sutra 4 and so on

Sutra 3 as Udharav and Tirayak as Instrumental form (करण / Karan), TCV (करण) = 14 = H4 with numbers range 1 to 14 as of factors 23, parallel with TCV (ऊर्ध्व) becomes locative (अधिकरण Adhikaran) TCV (अधिकरण). Sutras Grammar is of unique features Vyakaran Vedanga scripture (अष्टाध्यायी) is the most helpful in this direction of understanding and application of Sutras. For the composition Sathapatya, values interpretation, application rules, Asthadhayi rules on all these aspects are fully applicable for Ganita Sutras text. Rather, Ganita Sutras values and Sathapatya features also emerge as basis base of settlement Sathapatya of even Ashtadhayayi.

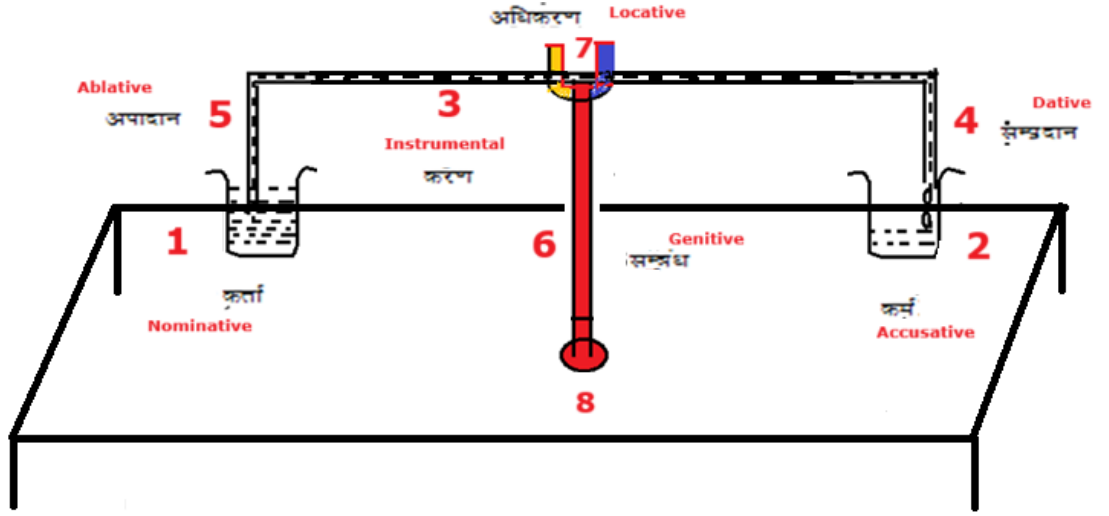


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Sutras Grammar

विभक्तियों के रूप (Inflexional Terminations)			
विभक्ति	एकवचन (Singular)	द्विवचन (Dual)	बहुवचन (Plural)
प्रथम (1st)	अः (सु)	औ	आः (जसु)
द्वितीया (2nd)	अम्	औद्	आः (शसु)
तृतीया (3rd)	आ (टा)	भ्याम्	भिः (भिसु)
चतुर्थी (4th)	ए (डे)	"	भ्यः (भ्यसु)
पंचमी (5th)	अः (डसि)	"	"
षष्ठी (6th)	अः (डसु)	ओः (ओसु)	आम्
सप्तमी (7th)	इ (डि)	" "	सु (सुप)

ध्यातव्य वार्ते —



Vishnu Puran in its chapter 15 of first Ansh as shaloka no 94 specifically mentions Ganita Sutra 3 while reaching at phase and stage of creations

**ऊर्ध्वं तिर्यग्धश्चैव यदाऽप्रतिहता गतिः
तदा कस्माद्भुवो नान्तं सर्वे द्रक्ष्यथ बालिशाः**

This aspect, values and Sathapatya, is being taken up in PDF document 11.5.4 onwards.

24-05-2025

Dr. S. K. Kapoor